



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,201	03/24/2004	Glynn Ashman	1-25153	3915

46582 7590 11/05/2004

MACMILLAN, SOBANSKI & TODD, LLC  
ONE MARITIME PLAZA - FOURTH FLOOR  
720 WATER STREET  
TOLEDO, OH 43604

EXAMINER

RODRIGUEZ, PAMELA

ART UNIT PAPER NUMBER

3683

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/808,201

Applicant(s)

ASHMAN ET AL.

Examiner

Pam Rodriguez

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06/14/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 26A as described on page 11 line 19. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: on page 11 line 26 the phrase "carrier 22" should read —carrier 11—to be consistent with the drawings and the previous lines of the specification, on page 11 line 28, page 12 line 1, and page 12 line 11, the numeral designations "26A and 26B" should read —34A and 34B—to be consistent with the designation of these terms previously delineated as such, and on page 12 line 9 the word "chamber" should read —chamfer--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. Claim 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the opening" in line 3. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-13 and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,706,916 to Cortes Guasch et al (hereby referred to as the Cortes reference).

Regarding Claim 1, Cortes discloses a disc brake assembly (see Figures 1-3) comprising an anchor bracket 2, a brake shoe which carries a friction pad (41 or 42) and a piston 31 slidably connected to the anchor bracket which is arranged such that upon movement of the piston relative to the anchor bracket the piston acts upon the brake shoe to move the shoe into contact with a brake disc, and in which the assembly further

Art Unit: 3683

includes a retraction mechanism (see Figure 3) which is adapted to retract the brake shoe from the disc when the piston is retracted, the retraction mechanism comprising at least one pin 520 secured to one of the friction pad 41 or 42 and the anchor bracket and a spring clip 52b fixed relative to the pin 520 which acts between the pin and the other one of the anchor bracket and the friction pad, deformation of the spring clip as the pad is moved towards the disc providing a returning force to pull the friction pad away from the disc when the piston is retracted (see column 3 lines 33-47), and in which the spring clip 52b is fixed in position relative to the pin 520 during normal use but is adapted to slide along the pin in the event that the displacement of the friction pad relative to the anchor bracket due to wear of the friction pad produces a deformation of the spring clip which exceeds a predefined limit (see column 3 lines 29-32).

Regarding Claim 2, Cortes further discloses that the pin 520 is secured to the brake shoe (see column 3 lines 26-28) and the spring clip 52b contacts the anchor bracket (see column 3 lines 16-22).

Regarding Claim 3, Cortes discloses that the spring clip 52b (see Figure 8) comprises a resilient plate having an opening C through which the pin 520 passes and defining at least one wing (the portion labeled at numeral 52b) which is in contact with the anchor bracket (see Figure 3), the wing deforming resiliently as the friction lining moves towards the disc (see column 3 lines 33-47).

Regarding Claim 4, Cortes discloses that the spring clip 52b defines at least two wings which extend in opposing directions away from the opening and each wing is in

contact with the anchor bracket (see Figure 3 and the portions labeled at numerals 52b).

Regarding Claim 5, see Figure 3.

Regarding Claim 6, note this claim limitation is inherent in the design of the Cortes reference. No matter what the size/shape constraints of the clip are, it's movement will be limited based on its degree of deformity.

Regarding Claim 7, see Figures 3 and 4 and note that it appears that the spring force of the clip is greater in the direction away from the lining since, upon clip deformation, it must abut up against portion 521 of the pin 520 when a brake action is initiated.

Regarding Claim 8, see Figure 3.

Regarding Claim 9, see Figure 4 and column 3 lines 33-47.

Regarding Claim 10, see retraction mechanism 52a and 52b and column 3 lines 16-22.

Regarding Claim 11, see Figures 1 and 2.

Regarding Claim 12, see Claims 1 and 3.

Regarding Claim 13, note that rim 521 of the rivet 520 acts to clamp the clip in place.

Regarding Claim 15, see column 3 lines 23-25.

Regarding Claim 16, see pins 520 and clips 52a,b and 51a,b and column 3 lines 26-28.

Regarding Claim 17, see column 3 lines 26-28.

Regarding Claim 18, see Claim 17.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,706,916 to Cortes Guasch et al in view of U. S. Patent No. 4,574,922 to Varin et al.

Regarding Claim 14, Cortes discloses most all the features of the instant invention as applied above, except for the spring clip including one or more tangs which

are bent out of the plane of the clip towards the brake shoe assembly and project into the opening through which the pin passes to resiliently engage the pin.

Varin et al are relied upon merely for their teachings of a brake assembly having a pin 26 (see Figure 3) and a spring clip 21 which includes a tang 58, a portion of which contacts the pin (see Figure 6 and the portion of "clip" 21 abutting pin 26 which is a branch of tang 58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the spring clip of Cortes to include a tang as claimed as taught by Varin et al in order to provide additional support or adjustment capability for the pin relative to the brake shoe.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oshima, Dirauf et al., Madzgalla et al., Thiel et al., Kondo et al., Kato et al., and Loeffler et al all disclose brake shoe assemblies having spring clips similar to applicant's.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 6 am -4 pm and Tuesdays 6 am -12 pm.



Art Unit: 3683

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Pam Rodriguez  
Primary Examiner  
Art Unit 3683  
11/1/04

Pr  
11/01/04